

Question	Answer	Solution																																
6.	1. Given 2. Def. of \angle bisector 3. Def. of $\cong \triangle$ 4. Given 5. Subst. 6. \angle Add. Post. 7. Subst. 8. Simplify. 9. Def. of rt. \angle	1. Given 2. Def. of \angle bisector 3. Def. of $\cong \triangle$ 4. Given 5. Subst. 6. \angle Add. Post. 7. Subst. 8. Simplify. 9. Def. of rt. \angle																																
8a.	Def. of rt. \angle	Def. of rt. \angle																																
8b.	$m\angle 1 + m\angle 2 = m\angle BAC$	$m\angle 1 + m\angle 2 = m\angle BAC$																																
8c.	$m\angle 2 = m\angle 3$	$m\angle 2 = m\angle 3$																																
8d.	Subst.	Subst.																																
8e.	$\angle 1$ and $\angle 3$ are comp.	$\angle 1$ and $\angle 3$ are comp.																																
10.	<table><tr><th>Statements</th><th>Reasons</th></tr><tr><td>1. $\angle 1$ and $\angle 3$ are comp., $\angle 2$ and $\angle 4$ are comp.</td><td>1. Given</td></tr><tr><td>2. $m\angle 1 + m\angle 3 = 90^\circ$, $m\angle 2 + m\angle 4 = 90^\circ$</td><td>2. Def. of comp. \triangle</td></tr><tr><td>3. $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 4$</td><td>3. Subst.</td></tr><tr><td>4. $\angle 3 \cong \angle 4$</td><td>4. Given</td></tr><tr><td>5. $m\angle 3 = m\angle 4$</td><td>5. Def. of $\cong \triangle$</td></tr><tr><td>6. $m\angle 1 = m\angle 2$</td><td>6. Subtr. Prop. of =</td></tr><tr><td>7. $\angle 1 \cong \angle 2$</td><td>7. Def. of $\cong \triangle$</td></tr></table>	Statements	Reasons	1. $\angle 1$ and $\angle 3$ are comp., $\angle 2$ and $\angle 4$ are comp.	1. Given	2. $m\angle 1 + m\angle 3 = 90^\circ$, $m\angle 2 + m\angle 4 = 90^\circ$	2. Def. of comp. \triangle	3. $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 4$	3. Subst.	4. $\angle 3 \cong \angle 4$	4. Given	5. $m\angle 3 = m\angle 4$	5. Def. of $\cong \triangle$	6. $m\angle 1 = m\angle 2$	6. Subtr. Prop. of =	7. $\angle 1 \cong \angle 2$	7. Def. of $\cong \triangle$	<table><tr><th>Statements</th><th>Reasons</th></tr><tr><td>1. $\angle 1$ and $\angle 3$ are comp., $\angle 2$ and $\angle 4$ are comp.</td><td>1. Given</td></tr><tr><td>2. $m\angle 1 + m\angle 3 = 90^\circ$, $m\angle 2 + m\angle 4 = 90^\circ$</td><td>2. Def. of comp. \triangle</td></tr><tr><td>3. $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 4$</td><td>3. Subst.</td></tr><tr><td>4. $\angle 3 \cong \angle 4$</td><td>4. Given</td></tr><tr><td>5. $m\angle 3 = m\angle 4$</td><td>5. Def. of $\cong \triangle$</td></tr><tr><td>6. $m\angle 1 = m\angle 2$</td><td>6. Subtr. Prop. of =</td></tr><tr><td>7. $\angle 1 \cong \angle 2$</td><td>7. Def. of $\cong \triangle$</td></tr></table>	Statements	Reasons	1. $\angle 1$ and $\angle 3$ are comp., $\angle 2$ and $\angle 4$ are comp.	1. Given	2. $m\angle 1 + m\angle 3 = 90^\circ$, $m\angle 2 + m\angle 4 = 90^\circ$	2. Def. of comp. \triangle	3. $m\angle 1 + m\angle 3 = m\angle 2 + m\angle 4$	3. Subst.	4. $\angle 3 \cong \angle 4$	4. Given	5. $m\angle 3 = m\angle 4$	5. Def. of $\cong \triangle$	6. $m\angle 1 = m\angle 2$	6. Subtr. Prop. of =	7. $\angle 1 \cong \angle 2$	7. Def. of $\cong \triangle$
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16.	S	sometimes																																
20.	15	$4n + 5 + 8n - 5 = 180$ $12n = 180$ $n = 15$																																